

greater than about 0.0005 inches and less than about 0.06 inches has a loss factor of greater than 0.0001;

an insulating layer, positioned between the transmission layer and the ferrite powder containing medium,

wherein the ferrite powder containing medium is configured to magnetically couple to an electromagnetic signal in the transmission layer where the electromagnetic signal is more than about 1 MHz and less than about 300 GHz

~~33~~ 32. A circuit board adapted to suppress electromagnetic interference, the circuit board comprising:

an electrically conductive transmission layer defining a circuit pattern;

a ferrite powder containing medium spaced from the electrically conductive transmission layer wherein the ferrite powder has a particle size of greater than about six tenths of a micron and less than about ten microns and has an imaginary component of a complex permeability of more than about 10, and the ferrite layer has an effective thickness of greater than about 0.0005 inches and less than about 0.06 inches has a loss factor of greater than 0.0001; and

an insulating layer, positioned between the transmission layer and the ferrite powder containing medium,

wherein the ferrite layer is configured to magnetically couple to an electromagnetic signal in the transmission layer where the electromagnetic signal is more than about 1 MHz and less than about 300 GHz.

~~34~~ 33. A circuit board adapted to suppress electromagnetic interference, the circuit board comprising:

an electrically conductive transmission layer defining a circuit pattern;

a ferrite powder containing medium spaced from the electrically conductive transmission layer wherein the ferrite powder has a particle size of more than about 1 micron and less than about 5 microns and has an imaginary component of a complex permeability of more than about 100 for at least one frequency of more than about 20 MHz and less than about 1 GHz and wherein the ferrite powder has a flux density of at least about 2000 gauss, wherein the ferrite powder containing medium has an effective thickness of greater than about 0.005 inches and less than about 0.01 inches, and wherein the ferrite powder containing medium has a loss factor of greater than 0.0005; and